

WHAT IS CLAIMED IS:

1. A method for assembling a fan platform for a gas turbine engine, said method comprising:

determining an area of vulnerability to impact damage across the platform;

forming a sheet of cladding metal to substantially conform to a contour of the identified area of vulnerability of the platform; and

bonding the cladding metal to the identified area of vulnerability.

2. A method in accordance with Claim 1 wherein determining an area of vulnerability comprises determining the area of vulnerability based on fan rotational speed and predetermined foreign object trajectories.

3. A method in accordance with Claim 1 wherein forming a sheet of cladding metal comprises:

annealing the sheet of cladding metal;

cold-forming the sheet of cladding metal;

heat-treating the cold-formed sheet of cladding metal; and

aging the heat-treated sheet of cladding metal.

4. A method in accordance with Claim 1 further comprising:

etching the formed sheet of cladding metal; and

applying an anodized coating to the formed sheet of cladding metal prior to bonding the cladding metal.

5. A method in accordance with Claim 1 wherein bonding the cladding metal to the platform comprises bonding the formed sheet of cladding metal to the platform with a supported film adhesive.

6. A fan platform for a gas turbine engine, said platform comprising:

a body portion;

a flow path surface coupled to said body portion, said body portion and said flow path surface defining at least a portion of a flow path extending through the engine; and

an impact barrier reinforcing said flow path surface, said impact barrier comprising a layer of cladding metal having a contour that substantially conforms to a contour of a portion of said flow path surface, said impact barrier is bonded to said flow path surface.

7. A fan platform in accordance with Claim 6 wherein said body and said flow path surface are each fabricated from a composite material.

8. A fan platform in accordance with Claim 7 wherein said body and said flow path surface are each fabricated from a composite material that includes carbon fiber.

9. A fan platform in accordance with Claim 6 wherein said cladding metal comprises aluminum.

10. A fan platform in accordance with Claim 9 wherein said cladding metal has a thickness of about twenty thousandths inches.

11. A fan platform in accordance with Claim 6 wherein said cladding metal comprises an anodized coating.

12. A fan platform in accordance with Claim 6 wherein said cladding metal is etched.

13. A fan platform in accordance with Claim 6 wherein said cladding metal is bonded to said flow path surface with an adhesive.

14. A gas turbine engine comprising:

a fan comprising a plurality of circumferentially-spaced fan blades; and

a fan platform extending between a pair of circumferentially-adjacent fan blades and defining a fan flow path therebetween, said platform comprising a flow path surface, a portion of said flow path surface comprising a layer of cladding metal bonded thereto, said cladding metal having a contour that substantially conforms to a contour of said flow path surface.

15. An engine in accordance with Claim 14 wherein said fan platform is fabricated from a composite material.

16. An engine in accordance with Claim 14 wherein said fan platform is fabricated from a composite material that includes carbon fiber.

17. An engine in accordance with Claim 14 wherein said cladding metal comprises aluminum.

18. An engine in accordance with Claim 17 wherein said cladding metal has a thickness of about twenty thousandths inches.

19. An engine in accordance with Claim 14 wherein said cladding metal comprises an anodized coating.

20. An engine in accordance with Claim 14 wherein said cladding metal is etched.